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UNITED STATES DISTRICT COURT

DISTRICT OF OREGON

PORTLAND DIVISION

LEUPOLD & STEVENS, INC., Plaintiff, v. **LIGHTFORCE USA, INC. d/b/a NIGHTFORCE OPTICS and NIGHTFORCE USA,** Defendant.	Civil Case No.: 3:16-cv-01570-HZ **LIGHTFORCE USA, INC.'S CLAIM CONSTRUCTION REPLY BRIEF**

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I. INTRODUCTION

The opening briefs reveal several important themes. First, construction of a small subset of the disputed terms should prove dispositive on the issue of non-infringement for most counts. In view of this, NF primarily focuses on those terms in this response.[1] Those terms are: "selectively moveable" (sub-phrase) (Count I), "actuator/lock actuator/drives/drives" (addressed together) (Counts II and VIII), "locking mechanism" (Count III), and "around" (Count IV).

Second, LD is inconsistent in its application of the law from term to term when arguing for narrower or broader constructions. When strategy dictates, LD opts for narrow constructions based on specific, non-limiting embodiments from the specification. Where LD seeks broader constructions, LD argues that reliance on specific, non-limiting embodiments are violations of claim construction principles. In contrast to LD, in those limited situations where NF seeks a narrower construction, it is mandated by the intrinsic evidence, law, and sound claim construction principles.

Third, LD's opening brief frequently relies on new evidence that was not disclosed in the Joint *Markman* Claim Construction Chart (Doc. No. 45) or that was otherwise provided to NF. While this ambush tactic should be highly discouraged and such evidence should generally be ignored, much of this new evidence is unhelpful and even contradictory to LD's positions. As such, to avoid the need for motion practice to strike this new material, NF simply responds to these instances, where appropriate. Those instances where LD felt the need to employ this dubious tactic are telling of the weakness of its positions.

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[1] *Exigent Technology, Inc. v. Atrana Solutions, Inc.*, 442 F.3d 1301, 1310 n. 10 (Fed. Cir. 2006) ("[I]t is appropriate for a court to consider the accused device when determining what aspect of the claim should be construed.").

II. DISPUTED TERMS

A. Three Windauer Patents (Counts I, II, and VIII)

There are three "Windauer" patents in this litigation which all share the same specification and claim priority to the same provisional applications. The three Windauer patents correspond to Count I (8,006,429), Count II (8,516,736), and Count VIII (9,665,120) (the '429, '736, and '120 respectively). There are fourteen terms in dispute between the three Windauer patents. For the convenience of the Court, these fourteen terms are discussed in five groups below. The importance of each group from an infringement or validity standpoint is provided in each section. It is noted that by adopting Nightforce's constructions: i) the first three groups of terms (with a total of seven individual terms) are determinative with respect to non-infringement, and ii) the fourth group (with a total of four individual terms) is determinative with respect to video camera prior art being invalidating. The fifth group includes the final three terms.

1. Four Terms That Do Not Appear in the Windauer Patents

There are four disputed terms that do not appear *anywhere* in the text of the Windauer patents, but such terms (or similar terms) *do appear* in one or both of the Windauer provisional applications (60/638,561 and 60/632,331) which are incorporated by reference. These four terms are: "actuator" ('736), "lock actuator" ('736), "drives" ('736), and "drives" ('120). The parties have agreed to consider these four terms together as they raise the same issues. The guidance from these Provisionals makes it clear that these terms relate to computer controlled, motor-driven type components as proposed by NF. None of the accused products are computer controlled or motor-driven. Therefore, adopting NF's construction of these terms would result in non-infringement of all of the claims of both the '736 and '120 patents. Leupold wants to avoid such a construction. However, as they *chose* to employ claim terms that do not appear anywhere

in the Windauer patents, and *chose* to use terms that *do appear* in the Provisionals (or similar terms that do appear in the Provisionals) which are specific computer controlled, motor-driven components, they should not be rewarded by adopting an infringement-based construction.

LD's arguments regarding "actuator" as being a manually controlled component are unpersuasive as each point raised in their Opening Brief supports NF's construction.

LD cites the *American Heritage Dictionary*, 1996, page 18, for "actuator" and "actuate," but *failed to include the underline language*:

> *Actuator*: One that activates, especially a device responsible for actuating a mechanical device, such as one connected to a computer by a sensor link.
> *Actuate:* to put into motion or action: electrical relays that activate the elevator's movements.

LD attempts to support their position that "actuator" is un-related to computer controlled, motor driven components *by leaving out the underlined text*. The above definitions explicitly contemplate a computer link, as well a motor control (e.g., motors are what drive elevators). These crop-quoted definitions support NF's position, particularly in light of the incorporated Provisional applications that only use "actuator" to refer to computer controlled, motor driven components. LD's own extrinsic evidence supports NF's construction.

Next, LD asserts that definitions of "actuator" and "drives" provided by NF are incompatible with the definitions of "button" and "mechanically driving" in the Huynh patent (U.S. Pat. 9,188,408*)* discussed in Count III below. The three Windauer patents are unrelated to the '408 patent (i.e., they are not part of the same patent family), they do not share a common inventor, they do not share the same specification, and were filed years apart. The Federal Circuit has stated that while terms should be construed consistently across patent family members, there is no reason for such a rule in un-related patents. *Trustees of Columbia Univ. v. Symantec Corp*., 811 F.3d 1359, 1369; (Fed. Cir. 2016). LD's argument regarding an un-related patent does not

support their interpretation of "actuator" or "drives."

Next, LD discusses the computer controlled, motor driven Advanced Optical Sighting System (AOSS) from the two Windauer Provisional applications and notes that the AOSS has been separately patented in U.S. Pat. 7,806,331; 8,033,464; and 8,317,100 ("other Windauer patents") - which all claim priority to the same two Windauer Provisional patent applications. The 'other Windauer patents' were not cited by LD as evidence they intended to rely on, and therefore should not be considered by the Court (Joint Chart, p. 13, Doc. No. 45).

To the extent such evidence is nonetheless considered, it is helpful to NF. LD's argument is that the Provisional application language should be ignored in the three Windauer patents in suit because there are three 'other Windauer patents' that claim the AOSS material. This argument fails. The two Windauer Provisional applications were fully incorporated by reference into the three Windauer patents, and therefore the text of these Provisional's are effectively part of the Windauer specifications and cannot be ignored.[2] Second, claim terms in patent family members are to be construed consistently across family members. *Trustees of Columbia Univ.* 811 F.3d at 1369. The three Windauer patents in suit, and the three 'other Windauer patents' all claim priority to the same two provisional applications, and share a named inventor (Bernard Windauer). Therefore, they are patent family members. The 'other Windauer patents' use the term "actuator" in the claims to refer to a computer controlled motorized component (see, e.g., Claims 4 and 10 of the '331). Therefore, citation to the other Windauer patents supports NF's construction of "actuator" as being computer controlled, motor-driven components.

[2] A provisional application incorporated by reference is "effectively part of the" specification as though it was "explicitly contained therein." *Trustees of Columbia Univ.*, 811 F.3d at 1366.

Finally, while "actuator" and "lock actuator" do not appear in the text of the Windauer patents, LD now argues that "index ring" is equivalent to "actuator" and "selector knob" is equivalent to "lock actuator" citing Figures 1-4, 6A-D, and 8A-8D. None of these figures were cited by LD as evidence that they intended to rely on (Joint Chart, p. 13, Doc. No 45). Furthermore, no portion of the specification was cited containing the terms "index ring" or "selector knob." Therefore, this new material should not be considered by the court.

To the extent such evidence is considered, no evidence has been provided that an "index ring" is an "actuator" or that a "selector knob" is a "lock actuator." Such an unsupported assertion is problematic, not only because the allegedly supporting evidence was not previously cited, but also for the fact that this assertion is not consistent with the broad definition LD has provided for "actuator" ("[a] device that puts another structure into motion or action"), and the narrower embodiments provided for "index ring" in the Windauer Figures and text. Moreover, nothing prevented LD from choosing to use the terms "index ring" and "selector knob" in the claims (i.e., using terms that *appear* in the Windauer specification), instead of *choosing* to use words that did not appear in the specification ("actuator" and "lock actuator.").

2. <u>Two Terms Reciting "Selectively Moveable"</u>

There are two disputed phrases that contain the sub-phrase "selectively moveable." The '736 patent recites "the second portion *selectively moveable* between locked and unlocked positions" and the '120 patent recites "second lock element *selectively moveable* relative to the first lock element." The central dispute between the parties is whether "selectively moveable" means that the second portion is simply moveable between a locked and an unlocked position, which requires *only one locked position* be available (LD's construction), or whether this phrase means that the second portion is moveable between locked and unlocked positions, where

multiple locked positions are chosen from. (NF's construction). Two of the three accused products have a single locking position and therefore would not infringe under NF's construction. NF's construction is correct as: 1) it does not render the term "selectively" in front of "moveable" superfluous; 2) it is consistent with the usage of "selectively" in the specification as referring to multiple positions; and 3) is consistent with dictionary definitions which refer to "selectively" as choosing from among several.

LD attempts to re-characterize NF's construction as requiring the recited component as being lockable in "*every 360º position*." NF's proposed construction recites, in part, "where the first position is chosen from *multiple positions*." NF is simply asserting that "multiple positions" are required (i.e., at least 2) and has not asserted that "every 360º position" is required.

Next, LD asserts that NF's construction is unwieldly because it does not specify that the structure is moveable between locked/unlocked positions "by a user" as recited in LD's construction. LD does not explain why "by a user" is required except to provide the parenthetical "rather than inadvertently by bumping or vibration." This argument is unclear. However, it is noted that dependent Claim 10 in the '736 patent specifies that there is a "lock actuator" in operative association with the locking mechanism. As explained above, a "lock actuator" is a computer controlled motor driven component. Therefore, no "user" is required to move the structure between locked/unlocked positions in Claim 10 (and therefore in Claim 1). Positively reciting a "user" is therefore a further reason that LD's construction is not correct.

Next, LD asserts NF's construction improperly imports "multiple positions" into the claims based on one embodiment from the '736 patent at col. 2, lines 32-37 that shows multiple locked/unlocked positions. LD further asserts there is no cause to limit Claim 1 to 'multiple positions' based on the language of Claim 1 itself. In response, as noted above and in NF's

Opening Brief, Claim 1 itself says "*selectively* moveable," not just "moveable." Adopting LD's construction would render the term "selectively" superfluous, which is not permitted under Federal Circuit precedent. *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005). NF's construction, therefore, it not importing terms into the claims from the specification as suggested, but instead, simply giving meaning to the term "selectively" as referring to multiple positions. The cited section of the specification is simply cited to show consistency with the claims, where every embodiment involves multiple positions.

Finally, in the '120, LD objects to NF's recitation of "it" in the proposed construction, where "it" refers to the "second lock element." LD asserts that Claims 1 and 17 relate to the "adjustment knob," not the second lock element, being rotatable and unable to be rotated. LD asserts this somehow imports a limitation into the claims. It is unclear what limitation is imported. As stated above, the phrase "selectively moveable," to avoid rendering "selectively" superfluous, must have a meaning different than simply "moveable." The use of "selectively" clearly refers to multiple positions where "it" (the second lock element) is engaged to the first lock element "in a locked position to restrain rotation of the adjustment knob about the rotational axis" as recited in Claims 1 and 17. NF's construction is consistent with the '120 claims.

3. <u>"engage one another in a locked position" ('120)</u>

The central difference between the constructions is whether, when the first and second lock elements are secured to one another, they either: i) *can* still rotate about the axis of rotation together, or ii) *cannot* be rotated about the axis of rotation. NF's construction, based on the intrinsic evidence in the claims and specification, makes it clear that "engage one another in a locked position" means that, when engaged, the first and second lock elements *cannot* then be

rotated about the axis of rotation. At least one of the three accused products does not infringe under this construction as it has a fine adjust function that is always active.

As explained in NF's Opening Brief, the independent claims make it clear that when the second lock element is engaged to the first lock element, these locked elements cannot be rotated about the axis of rotation *as the first lock element is defined in the claims as "fixed"* to the sighting device (*i.e.*, the first lock element is defined as a non-moving, fixed element). Therefore, when the second lock element engages the *fixed* first lock element, it too cannot rotate (*i.e.*, the first and second lock elements are then locked in a fixed position that cannot rotate). This claim language is supported in the specification which repeatedly uses "cannot be rotated about the axis" in reference to components locked together ('120, col. 5, lines 4-10; col. 6, lines 40-46).

LD asserts that the first and second lock elements are fastened or secured only relative to one another. LD cites Dictionary.com for "lock *verb* used with an object" citing definitions 12 and 15, as well as "lock *noun*: a contrivance for fastening or securing something." First, none of these dictionary definitions were cited by LD as evidence they intended to rely on (Joint Chart, p. 93, Doc. No 45), and therefore they cannot be used. Second, the Exhibit provided by LD fails to include any of the verb definitions cited, including 12 and 15. Third, in the disputed phrase "engage one another in a locked position," "locked" is an *adjective* modifying the noun "position" - not a verb or noun as proposed by LD. Therefore, to the extent this evidence is considered, it is not relevant to the term "locked" in the disputed phrase. Finally, these definitions do not address whether the first and second lock elements, when engaged, can or cannot still rotate about the axis of rotation (except for possibly definition no. 15 "to make fast or *immovable*, as by engaging parts," which supports NF's positions, not LD's position).

4. Four Terms Involving the Same Specification Definition

There are four disputed terms that involve the explicit definition of "telescopic sight" provided in the Windauer specification. These terms are "telescopic sight" ('429), "telescopic sighting device" ('736), "firearm sighting device," ('736) and "sighting device" ('120). LD attempts to avoid this definition by construing these terms to be limited to "firearms" or "aiming" in an attempt to avoid invalidity of the Windauer claims in view of the Video Camera prior art - which anticipates nearly all of the claims in all three Windauer patents. NF's construction is not limited to only firearm sighting devices, but includes other optical sighting devices.

The Windauer specification includes the following definition for "telescopic sight:"

> The present disclosure relates to an optical enhancing device, such as a telescopic observation sighting device or individual shoulder (or hand-fired) firearms sighting device (**telescopic sight herein**). (*emphasis added*). (US 8,006,429, col. 1, lines 15-18).

The parties read the above definition differently. LD asserts that "telescopic sight herein" *only* refers to the last half of the sentence that references 'firearm sighting devices.' NF asserts that "telescopic sight herein" refers to both the "telescopic observation sighting devices" and the "firearm sighting devices" referenced in the sentence.

NF's reading is correct. The definition is a *single sentence* that ends with the parenthetical "telescopic sight herein" making is clear, under normal grammar, that the rest of the sentence is being grouped together as part of the definition. Perhaps more striking is that "*telescopic* sight herein" uses the word "telescopic." Under LD's strained reading "*telescopic* observation sighting device" would somehow be *excluded* from "*telescopic* sight herein," while only firearm sighting devices would be included. It strains logic to suggest that the word "telescopic" would be used in the definition, but somehow exclude "telescopic" observation

sighting devices - particularly when they are part of the same single sentence. As such, it is clear that "telescopic sight" includes both the "telescopic observation sighting devices" and "firearm sighting devices" referenced in the definitional sentence above. This straightforward definition is implicated in the construction of four related terms as described in NF's Opening Brief, and as explained below.

"telescopic sight" ('429) - The definition above for "telescopic sight" controls the construction of this phrase, and dictates that both "telescopic observation sighting devices" and "firearm sighting devices" are included in this phrase. LD's construction for "telescopic sight" is limited to only firearm sighting devices, and therefore cannot be correct as it violates the express definition. LD's Opening Brief crop-quotes the above definition, leaving out the entire first half of the sentence, and instead just includes the last half containing the 'firearm sighting devise' language and the parenthetical "(**telescopic sight herein**)." Crop-quoting the definition does not somehow change this definition to include only firearm sighting devices. LD also cites two dictionaries (NRA Glossary and 4H Glossary) for the term "sight" that were not provided by LD as part of the evidence they intended to rely upon (Joint Chart, pp. 9-10, Doc. No 45), and therefore cannot be used. Finally, LD complains that NF's construction of "telescopic sight" ignores the concept of "sighting" in "sighting device." This argument, the point of which is not entirely clear, appears to be based on the definition of "sight" from the NRA glossary, which was not listed as part of the evidence upon which LD intended to rely, and therefore cannot be used.

"telescopic sighting device" ('736) - LD proposes "to construe this claim consistently with the term "telescopic sight" as used in the related '429 patent." NF agrees. Therefore, the definition from the specification described above for "telescopic sight" controls, which means this term includes both "telescopic observation sighting devices" and "firearm sighting devices."

"firearm sighting device" ('736) - As detailed in NF's Opening Brief, the word "firearm" appears only in the preamble and is therefore not an element of the '736 claims. The body of Claim 1 and the dependent claims all refer only to a "sighting device," not a "firearm sighting device," making it clear "firearm" is not an element of the claims. Moreover, dependent Claim 2 refers to a "telescopic sighting device," which, as defined in the specification (discussed above), includes both "telescopic observation sighting devices" and "firearm sighting devices." Dependent Claim 2 cannot be broader than independent Claim 1 (*Alcon Res.*, 687 F.3d at 1367), and therefore, "sighting device" in Claim 1 includes both "telescopic observation" and "firearm" sighting devices. LD cites various definitions for "sight" and "sighting device," and point to six definitions (Ferris Decl. Exs. 10, 13-16, and 17) that were not cited as part of the evidence they intended to rely (Joint Chart, pp. 11-12, Doc. No 45). Such evidence cannot be used.

"sighting device" ('120) - The central difference between the constructions of the phrase "sighting device" is whether this term is specifically an "aiming device," (LD's construction) or is not necessarily limited to "aiming" and instead includes "observation" with an optical enhancing device (NF's construction). Again, the definition above for "telescopic sight" is instructive as it contains the only two instances of "sighting device" in the '120 as filed:

> The present disclosure relates to an optical enhancing device, such as a telescopic observation sighting device or individual shoulder (or hand-fired) firearms sighting device (telescopic sight herein). (US 9,665,120, col. 1, lines 22-25, *emphasis added*).

The above text indicates that there are two types of sighting devices: "telescopic observation sighting devices" and "firearm sighting devices," which are collectively referred to as "telescopic sights." The '120, therefore, explicitly includes telescopic *observation* in the use of "sighting device" as in NF's construction (*i.e.*, the '120 specifically indicates that LD's construction, limited to "aiming," is not correct). LD alleges that the '120 references "firearm

sighting devices" and "telescopic observation sighting devices "separately." A cursory review of the definition quoted above makes it clear that these terms are not discussed separately, but instead are in a *single sentence* and are even grouped into the single definitional term "telescopic sight." Finally, LD makes an argument regarding "aiming" by once again citing evidence that was not cited as evidence they intended to rely on (Join Chart, pp 88, Doc. No 45). In particular, LD cites un-related patent 6,657,784 to Swarovski. This new evidence should not be considered.

5. Three Additional Terms

There are three additional terms in dispute.

a) "turret knob" ('429)

The parties disagree on whether "turret knob" is an element of the claims or not. While both parties have provided reasons for and against this term being an element of the claims - the main determining factor is that "turret knob" does not appear in the claims outside of the preamble. As the body of the claims define the invention without reference to "turret knob" in the preamble, it is not an element of the claims as proposed by NF (See, e.g., *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989)).

If this term is construed as a limitation, the main dispute is the addition of "generally cylindrical" in the LD construction, which is not present in NF's construction. LD did not provide any dictionary definitions that specified that "turret knobs" must be cylindrical. The main definition relied on by LD defines "turret" as "*Cylinders* on an optical sight's main tube which hold *adjustment knobs* or screws."[3] This definition does not indicate that the adjustment knob is cylindrical or generally cylindrical. Instead, it refers to "cylinders" as holding an adjustment knob, without specifying the shape of the knob itself. LD also pointed to six

[3] *NRA Glossary*, http://www.nramuseum.com/media/940932/glossary.pdf (Ex. 5)

definitions (Ferris Decl. Exs. 10, 11, 12, 13, 16, and 17) that were not cited by LD as part of the evidence they intended to rely (Joint Chart, pp. 3-4, Doc. No 45). Such evidence cannot be considered. LD also pointed to col. 3, lines 7-67 and Figure 1-9 of the '429 patent as part of their evidence, but this is not evidence they cited as part of the evidence they intended to rely (Joint Chart, pp. 3-4, Doc. No 45). Even if considered, the cited text (which is a brief description of Figures 1-9) indicates that the figures are not limiting stating: "[v]arious embodiments are illustrated by way of example and *not by limitation* in the accompanying figures." Therefore, the shape of the turret knobs is specifically not limited to the shapes shown in Figures 1-9.

Finally, LD alleges that NF's construction for "turret knob" is incorrect as it "would include all kinds of knobs that are not turret knobs so long as they *could* be used as turret knobs under some (undefined) conditions." (LD Opening Brief at page 4). LD's complaint is based on NF's construction referencing not only telescopic sights, but *other* optical enhancing devices such as lenses, microscopes, and telescopes. LD's argument is contradicted by the '429 *itself* which specifically contemplates turret knobs for all of the devices in NF's definition:

> It should be understood that the locking turret knob assemblies described herein can be used as adjustment knobs for a telescopic sight or any other optical-based instrument having adjustment knobs, for example an optical enhancing device *such as a lens or microscope, telescope, etc.* (*emphasis added*, '429, col. 10, lines 19-23).

NF's construction directly tracks this description of turret knobs in the specification.

b) <u>"engagement surface" ('429)</u>

LD asserted plain and ordinary meaning for "engagement surface," but has not offered any evidence. Therefore, this term must be construed, and the intrinsic evidence consulted.

LD asserts that "engagement surface" is "fixed" relative to the axis of rotation. Requiring the engagement surface to be "fixed" cannot be correct as: 1) dependent Claim 3 provides an

embodiment where the "engagement surface" (part of the "second member) is not fixed; and 2) nothing in the claims requires the engagement surface to be fixed.

c) "cam surface" ('736)

LD's proposed construction of "cam surface" is broader than the cited evidence from the specification and broader than the dictionary definition LD itself provided. LD asserts that NF's construction, which exactly matches a dictionary definition, is too narrow as it recites, in part, an "eccentric wheel" instead of a more generic term. NF is willing to compromise by inserting the broader term "rotating or sliding piece" (from LD's definition) for "eccentric wheel" into NF's construction. It is not appropriate to further broaden the definition to LD's construction, as their construction is much broader than the dictionary definition or any other evidence they provided. The definition provided by LD, with the text they seek to ignore lined out, is provide below:

> Cam - "~~a rotating or sliding piece (such as an eccentric wheel or a cylinder with an irregular shape) in a mechanical linkage used especially in~~ transforming rotary motion into linear motion ~~or vice versa~~."[4]

NF is willing accept "rotating or sliding piece" from LD's definition in place of "eccentric wheel" as shown below:

NF's compromise construction for "cam surface:" "A surface of ~~an eccentric wheel~~ a rotating or sliding piece mounted on a rotating shaft and used to produce variable or reciprocating motion in another engaged or contacted part." This compromise construction is consistent with the definitions provided by the parties, and use of "cam surface" (part 603) in the '736 specification.

B. Count III

Count III corresponds to U.S. Pat. 9,188,408 to Huynh, which has seven disputed terms.

[4] https://www.merriam-webster.com/dictionary/cam (Ex. 8)

1. "Locking Mechanism"

NF's construction of "locking mechanism" is mandated by the intrinsic record. It is based on definitional language from the specification that was expressly adopted as the basis for "locking mechanism" by LD during the prosecution of the '408 patent. LD's proposed construction requests plain meaning, when even its own evidence demonstrates that no plain meaning exists. Further, both LD's plain meaning request and its alternative proposed construction provide a definition that is overly broad, encompassing prior art that it disclaimed during prosecution, and that is functionally defined rather than structurally defined, when LD expressly stated during prosecution that "locking mechanism" is not a functional phrase, but rather a structural one. LD's audacious claim construction position for "locking mechanism," which runs contrary to all fact, law, and evidence, is driven by that fact that under NF's proposed construction, the accused products do not infringing the '408 patent claims.

LD's construction of "locking mechanism" seeks either "plain and ordinary meaning," or in the alternative, a functional construction covering all possible mechanisms "for securing a structure in a position." Neither of these options is viable.

First, plain and ordinary meaning is not viable because "locking mechanism" does not have a single meaning within the art. It is a phrase that requires context to understand its boundaries.[5] As explained in NF's Opening Brief, during prosecution, LD acknowledged that its claimed "locking mechanism" was of different structure than the prior art locking mechanism of Talpe. Plain and ordinary meaning does not differentiate between the claimed "locking

[5] Thus, '[a] determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute.' *O2 Micro*, 521 F.3d at 1361."

mechanism" and the locking mechanism of Talpe.

Further, LD has provided no evidence that a plain and ordinary meaning exists, what that meaning is,[6] or that only a single plain and ordinarily meaning exists. Leupold introduces a new dictionary definition of "lock," used as a verb, in its Opening Brief to support its position. This evidence was not cited in the Parties' Joint *Markman* Claim Construction Chart (Doc. N. 45) and therefore is improper and should not be considered.[7] However, it is also not relevant as the claim term in question is not "lock" (verb) but rather "locking mechanism" (noun) and it is the functional term "locking" in combination with the otherwise structurally undefined "mechanism" that requires construction.[8] Further, LD's dictionary.com definition from 2017 provides many different alternative definitions for "lock," with LD relying on verb sub-definitions 12, 14, and 15 in support of its position, while ignoring noun definitions that are discordant with the '408 patent, such as "air lock or decompression chamber." If anything, LD's new evidence demonstrates that there is no single plain and ordinary meaning for "lock," let alone for "locking mechanism." On this basis alone, plain meaning cannot be the correct construction.

LD's newly proposed "plain meaning" definition of locking mechanism as "for locking things" is purely functional. While in theory, a patentee can use functional terms in a claim, LD is legally estopped from now arguing that the phrase "locking mechanism" is functional or has a functional definition in view of LD's express statement during prosecution that "locking mechanism" is not functional, but to refers to structure.

As recommended by the examiner during a telephone interview on November 13, 2014,

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[6] LD's opening brief introduces, for the first time, that the plain meaning is "for locking things," which is unsupported by evidence and differs from its own proposed construction.
[7] Exhibit 19, the evidentiary basis for LD's new position, does not actually provide sub-definitions 12, 14, and 15 that LD seeks to rely on.
[8] The claims were amended during prosecution to change the term "lock" (as a noun) to "locking mechanism." Thus, the definition of "lock" is clearly not relevant.

> Applicant also states on the record that Applicant intends the claim terms 'locking mechanism' and 'mechanical coupling' not to be functional language that invokes § 112 ¶ 6, but rather to refer to structure. (Resp. to Office Action mailed June 13, 2014, page 14 (Ex. 19)).

Thus, even if "for locking things" were one of the plain meaning definitions that "locking mechanism" could theoretically have, it is not the one that LD adopted during the prosecution of the '408 patent and cannot be adopted here. The doctrine of prosecution disclaimer prevents patent owners from recapturing specific meanings of claim terms that were disclaimed during prosecution. *See, e.g., Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). For the doctrine to apply, the disavowing actions or statements by the patent owner must be both clear and unmistakable. *Id.* at 1325-26. LD's statement "on the record" could not be clearer or more unmistakable. The purpose of this doctrine is to ensure that claims are not construed one way by the patent owner to obtain their allowance before the U.S. Patent and Trademark Office, and in a different way against accused infringers. *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

Second, LD's proposed alternative construction of "a mechanism for securing a structure in a position" is not viable. First, it simply carries forward the word "mechanism" and does not resolve the claim construction dispute as to the meaning of "mechanism." Second, it seeks a breadth of the phrase that encompasses the Talpe prior art, which LD expressly stated, "discloses no structure that is analogous to the locking mechanism in the present application" (emphasis added).[9] Third, it is a functional definition, when the file history mandates a structural one. Thus, neither of LD's proposed constructions can be the correct construction.

In contrast, NF's construction is both legally and factually sound. As demonstrated in its Opening Brief, NF's construction acknowledges the requirement that the term "mechanism"

[9] See discussion and evidence provided in NF's Opening Brief (Doc No. 52, pp. 25-27).

requires multiple structural components. LD has provided no evidence or argument to the contrary. NF's construction also provides the structure of those multiple components. A claim construction defining the structure of the claimed "locking mechanism" is necessary because: 1) LD elected to make this a structural phrase during prosecution; 2) the phrase itself does not convey sufficient structure to provide clarity or to account for how the term was used to differentiate the prior art; 3) the phrase is defined structurally in the specification; and 4) that definitional language from the specification was relied on as the basis for adding "locking mechanism" to the claims in an amendment during prosecution and for providing its structure.

We know that "locking mechanism" must refer to a structure, rather than a function based on LD's file history statement cited above. We also know that not all locking mechanisms have the same structure based on the multiple potential meanings of locking mechanism, the file history of the '408 patent (Talpe's locking mechanism has a different structure), and from the claim language itself (requiring specific interaction of the locking mechanism with other components in specific ways). The claims, taking into account the specification and file history, must inform the skilled artisan of the scope of the invention with reasonable certainty,[10] i.e., what structure is encompassed by the claims? This question is properly addressed only by consultation of the specification and the file history, which provide the structural definition of "locking mechanism" that is otherwise lacking from the claims. Collectively, this intrinsic evidence explains why the claimed "locking mechanism" differs from Talpe, how the claimed mechanism accomplishes the interactions with other components recited in the claims, and provides an understanding of the scope of the claims: the locking mechanism has a linkage, a locking pin, and a wedge pin.

[10] *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014).

The specification defines the structure of "locking mechanism" both with definitional language (col. 7, lines 17-30) and by repeatedly and consistently characterizing the phrase "locking mechanism" as having a linkage, a locking pin, and a wedge pin.[11] There are no embodiments of a "locking mechanism" disclosed in the '408 patent that do not have these features. A "locking mechanism" according to the '408 patent is made of at least a linkage, a locking pin, and a wedge pin.

LD relied on the definitional language of "locking mechanism" from the specification during prosecution of the '408 patent when the phrase was first added to the claims to define its structure. Indeed, the phrase "locking mechanism" was amended into the claims exactly for the reason that the specification defined it, as opposed to the term "lock," which it replaced, a term that the Patent Office had deemed to be insufficiently supported in the specification.

> In response to paragraph 7 ('lock') of the Office action, Applicant has amended the claims by replacing the claim term 'lock' with 'locking mechanism' in all pending claims. This amendment is not intended to narrow the scope of the claims but rather to use a term with adequate antecedent basis in the specification. **The 'locking mechanism' structure is described with reference to the drawings in paragraph [0046] of Applicant's specification**. (emphasis added, Response, page 12, paragraph 0046 corresponding to col. 7, lines 17-30 of US 9,188,408).

NF's construction uses the definitional language from the specification that LD cited as the description of the structure of "locking mechanism." There is no broader or alternative

[11] *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1367-68 (Fed. Cir. 2007) (limiting claim term "composite composition" to pellets in light of statements in specification that are "not descriptions of particular embodiments, but are characterizations directed to the invention as a whole"); *Microsoft Corp. v. Multi-Tech. Sys., Inc.*, 357 F.3d 1340, 1348 (Fed. Cir. 2004) (finding that statements in common specification serve to limit claim language because they "are not limited to describing a preferred embodiment, but more broadly describe the overall inventions of all three patents"); *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1370 (Fed. Cir. 2003) ("[T]his court looks to whether the specification refers to a limitation only as a part of less than all possible embodiments or whether the specification read as a whole suggests that the very character of the invention requires the limitation be a part of every embodiment.").

structural description available in the intrinsic evidence. Paragraph [0046] of the original application is col. 7, lines 17-30 of the '408 patent and is quoted in NF's opening brief showing that the locking mechanism is defined as having a linkage, locking pin, and wedge pin.

LD selected this as the definition of "locking mechanism" when it drafted the specification and when it prosecuted the patent. It is not a preferred embodiment, it is the locking mechanism of the '408 patent. Preferred embodiments are described with respect to sub-features of these three components, adding additional features that may be included, and the ways they may interact with each other, which is subject matter claimed in dependent claims 5-8.

This is not an instance where the court is being asked to improperly import an embodiment of the specification into the claims. Rather, this is an instance where the patentee: 1) decided to become their own lexicographer and use a functional phrase to define a structural element; a phrase having multiple alternative meanings, some of which are not consistent with the invention, 2) use the specification to define the structure intended by the phrase; 3) rely on that definition during prosecution as the description of the structure of the phrase; and 4) distinguish the prior art during prosecution based on a difference in structure of the claimed "locking mechanism." LD's opening brief cites alternative embodiments of "locking mechanism" in the specification to suggest that NF's construction is directed to preferred embodiments. It is not. Each of LD's cited "other embodiments" features the three components of NF's construction, alternatively described in various breadths. In every instance, the locking mechanism's structure is defined as having a linkage, locking pin, and wedge pin. Without this

structural clarity defined in the specification and file history, a skilled artisan has no reasonable understanding of the metes and bounds of "locking mechanism" as recited in the claims.[12]

In its opening brief, LD seeks to avoid this only viable construction by relying on the concept of claim differentiation: arguing that because linkage, locking pin, and wedge pin are referenced in dependent claims, the independent claim must necessarily have a broader meaning. This argument fails on multiple grounds. First, the dependent claims referenced do not say: "the adjustment device of claim 1, wherein the locking mechanism is made of a linkage, a locking pin, and a wedge pin." Such a claim might have triggered claim differentiation to suggest that "locking mechanism" is something more than those three components. Rather, the dependent claims provide more specific detail on how the linkage, the locking pin, and the wedge pin are configured and how they interact with each other. LD's argument relies on claims 5 and 8. Claim 8 specifies that the "locking pin" has "a groove that aligns with the wedge pin," among other elements. Claim 1 does not require that the locking pin has a groove (i.e., it covers locking pins without grooves). Likewise claim 5 clarifies that it is the linkage of the locking mechanism that is coupled to the spindle (claim 1 more generally states that the locking mechanism is carried by the spindle without saying how), that the wedge pin is "slidably mounted" to the spindle (claim 1 is silent on this feature), and where "the linkage bears against the wedge pin" (claim 1 is silent on this feature). These claims are not superfluous if "locking mechanism" is given NF's

[12] *Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1255-1256 (Fed. Cir. 2008) ("When a claim limitation is defined in purely functional terms, the task of determining whether that limitation is sufficiently definite is a difficult one that is highly dependent on context (e.g., the disclosure in the specification and the knowledge of a person of ordinary skill in the relevant art area). We note that the patent drafter is in the best position to resolve the ambiguity in the patent claims, and it is highly desirable that patent examiners demand that applicants do so in appropriate circumstances so that the patent can be amended during prosecution rather than attempting to resolve the ambiguity in litigation.")

construction. Indeed, these claims support NF's construction by adding descriptions of preferred configurations of the features that are part of a "locking mechanism."[13] Further, even had claims 5 and 8 been drafted in a manner that might have triggered claim differentiation, claim differentiation does not apply where the specification and/or prosecution history mandate otherwise, such as the case here.[14]

2. "Button" and "Mechanically Driving"

The terms "button" and "mechanically driving" require construction to resolve the dispute between the parties as to whether the "locking mechanism" can be part of the button or whether they are separate components. NF's constructions simply seek to clarify that the "button" and "locking mechanism" are separate components that interact with each other as separate components via "mechanically driving." The key issue in dispute appears to be the construction of "mechanically driving" and whether it requires one object push a separate object (NF's construction) or whether the two objects can be combined as one unit and move together

[13] *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1370 (Fed. Cir. 2007) ("A further reason for not applying the doctrine of claim differentiation in this case is that the Group I claims are not otherwise identical but for the references to pellets, linear extrudates, and composite compositions, and thus the district court's construction does not make the composite composition claims redundant."); *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1326 (Fed. Cir. 2001) ("we further note that claim 3 embraces additional limitations not encompassed within claim 1 including, 'activating the communication of the record data of stored call charges from the mobile phone unit to the system provider.' Therefore, the doctrine of claim differentiation does not lead us to reach a different construction."); *Mantech Environmental Corp. v. Hudson Environmental Services, Inc.*, 152 F.3d 1368, 1376 (1998) ("Mantech's argument is flawed, however, because the steps defined in claim 4 of injecting potable water into the groundwater alone distinguish the scope of claim 4 from that of claim 1 and thus make Mantech's argument based on claim differentiation unavailing.")

[14] *Poly-America, L.P. v. API Industries, Inc.*, 839 F. 3d 1131 (Fed. Cir. 2016). ("But claim differentiation does not serve to broaden claims beyond their meaning in light of the patent as a whole, and it cannot override clear statements of claim scope found in the specification and prosecution history. *See Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1302 (Fed. Cir. 1999).")

(a concept that LD's construction attempts to capture). LD improperly cites new evidence in support of its position. However, this evidence supports NF's position by defining "driving" to "send, expel, or otherwise cause to move by force or compulsion." If the locking mechanism and button were connected as one component that moved together as LD's construction seeks, actuation of the button could not "send, expel, or otherwise cause to move by force or compulsion" the locking mechanism. LD argues that having the button and locking mechanism as one unit would be an ordinary example of one structure moving another by mechanical force, but this is not consistent with the intrinsic evidence or LD's own extrinsic evidence, which all requires "mechanically driving" to involve a transfer of force from one object to a separate object. The transfer of force is a critical feature of the '408 patent because the direction of force from the button, which is "manually depressible transverse to the axis" (claim 1), is transferred perpendicularly to the locking mechanism (see Fig. 4A of the '408 patent in NF's opening brief with arrow showing the direction and transfer of force from the button to the locking mechanism). If transfer of force were not an intended feature of the claims, there would have been no reason to include the language "mechanically driving" in the claims.

3. "Engagement Surface"

Engagement surface is not a term of art and no evidence has been provided to suggest otherwise. The specification defines an "engagement surface" as including regularly spaced apart features, such as detents. Detents are a preferred embodiment, spaced apart features is the generic definition of "engagement surface." It is the purpose of the invention: to provide the ability to lock the knob in any desired position of multiple positions. LD argues that "regularly spaced apart features" is an example of an engagement surface rather than a definition. But it is not an example. It is the definition of an otherwise indefinite term, with every instance of

"engagement surface" defined and described as having regularly spaced apart features, creating multiple locking positions. *See, e.g*., the authorities cited in footnote 12, above.

4. "Adjustable Portion"

LD suggests that NF's construction excludes an adjustable portion from being or containing an optical device. It does not. Rather NF's construction states that an adjustable portion need not only be an optical device. The specification makes it clear that the adjustable portion is not always an optical device itself. LD has provided no legal of factual basis to exclude these embodiments of the specification from the claim construction.

5. "Operatively Coupled"

The dispute is whether "operatively coupled" is limited to being mechanically coupled (directly or indirectly) (LD's construction), or may be coupled by other means as well (NF's construction). LD relies on specific examples from the specification to argue for its limited definition, without any factual or legal basis for why such embodiments should define the claim term narrowly. The specification includes non-mechanical examples (see NF's opening brief) and therefore there is no reason the term should be construed narrowly. LD also complains about the use of the term "operate" in NF's construction and the lack of clarity as to whether the coupling can be indirect. NF has no issue with these concepts and is happy to modify its construction to include LD's definition of operate ("exerting force or influence") and reference indirect interaction: "Linked together, directly or indirectly, so as to ~~operate~~ exert force or influence.

6. "Installed over the spindle"

LD's proposed construction is not supported by the intrinsic evidence. LD cites to specific embodiments in the specification to support its construction, but even those examples do

not support the construction, as none of them mention "fitted to sheath." LD appears to be most concerned about including the concept of "encircle" in its construction even though its own construction does not use this terminology. While not agreeing that this is a proper construction based on proper claim construction principles, NF can accept that feature for the purposes of this case and suggests a construction of: ~~rest on or cover~~ encircle the spindle.

C. Count IV

Count IV corresponds to U.S. Pat. 9,170,068 to Crispin, which has five disputed terms.

1. "Around"

Resolving the construction dispute of "around" resolves the infringement of the '068 patent. NF's accused products were designed to avoid the '068 patent by not employing a slide surface that extends around the rotational axis, but rather to sit on one side of the rotational axis. All of the evidence, from both parties, requires that "around" be defined as being on multiple sides of the rotational axis (even if not all sides). LD's proposed construction of "to the side of" is nonsensical. The slide surface of the claims is not simply "around" the axis of rotation but is "extending around." "Extending to the side of" makes no sense in the context of a component that facilitates "rotation" (mentioned twice in claim 1) of the knob around the axis of rotation and that has a second slide surface (claim 2) to permit a second rotation, which can only be achieved if a first full rotation is first made.

LD's argument relies on a dictionary definition that expressly excludes a single side of ("on all or various sides of"). LD also relies on an analogy involving a car accident. While such an analogy is not helpful in assessing how the term is used in the context of the invention of the '068 patent, it only further illustrates the absurdity of LD's construction as the analogy also requires that the car move at least 180 degrees during the process (i.e., more than one side of or

"to the side of"). The car starts on one side of the accident as it approaches the accident, then moves to a second side to avoid the accident, and then returns to its original direction on the opposite side (3rd side) of the accident. Thus, while driving "around" the accident, the car drives around multiple sides of the accident.

All of the intrinsic evidence requires a full encircling of the axis of rotation by the slide surface (it is the only way in which a second slide surface, permitting a second rotation, can be achieved). However, any requirement of a "180 degree or greater encircling" sufficiently addresses the infringement issue with respect to the '068 patent as the accused products have a surface at only one side of the axis of rotation.

LD makes much of an amendment during prosecution that changed the phrase "curved slide surface" to "slide surface," implying that this somehow allows the phrase "around" to mean "not around." This argument fails on multiple grounds. First, the amendment was made after the claims were deemed allowable and does not appear to be for any purpose of patentability. Therefore, nothing can be said about the intent, purpose, or meaning of the amendment. Second, even a favorable interpretation does not address the issue in dispute. Deletion of "curved" perhaps allows the slide surface to have a different shape than a curve (e.g., polygonal), and nothing more. Deletion of "curved" does not delete or change the meaning of "around" or "extending around." Third, this is "evidence" that LD did not disclose that they would rely on for their construction, and should be ignored.

2. "Slide Surface"

LD's entire argument related to "slide surface" is simply a repeat of the argument of "around," suggesting that NF's construction relates to the degree to which the slide surface encircles the axis of rotation. That is not the dispute. The dispute is whether contact is required

(contact with the guide tab). LD dodges this issue and provides no contrary evidence or argument. As such, the term should be construed to require contact.

3. Preamble (optical aiming device)

There are two disputes here. First, whether the functional language of the preamble should be treated as an element of the claim. Second, if it is treated as an element, whether the phrase "optical aiming device" is limited to weapon targeting devices (LD's construction).

LD spends much of its argument on the phrase "adjustment device." NF does not dispute that this phrase is an element of the claims. It is the functional language following this phrase that is in dispute. LD's other arguments are unavailing. LD notes that the body of the claim recites "the aiming device" referring to the "aiming device" of the preamble. However, nothing about the use of that phrase has any bearing on understanding the scope of "aiming device." (The fact that aiming devices include riflescopes is not in dispute).

With regard to the phrase "aiming device," LD mischaracterizes NF's argument. NF is not saying that "aiming device" include "any optical technology," but rather that it includes "other aimed optical devices," because that is what the specification of the '068 patent says. The specification of the '068 patent expressly describes aimed optical devices that are not weapon targeting devices (e.g., telescopes, binoculars).

LD introduces new dictionary definitions that it did not previously disclose in an attempt to define "other aiming device" more narrowly. This late entered evidence should be ignored. Moreover, in any event, the specification controls. The specification provides NF's definition and differentiates sighting devices (optical devices) that have knobs from non-sighting devices (radios, TVs) that have knobs. Binoculars are included in the sighting group and are not excluded from the claims. Thus, the claims are clearly not limited to weapon targeting devices.

4. "Indicator unit"

LD mischaracterizes the dispute. The dispute is whether the physical position of the indicator unit, linked to the guide tab, reveals the locked status (NF's construction). Rather than discussing this point, LD's arguments lobby to include the concept of "tactile" in the construction. NF is fine with not limiting the construction to "visible" positions, so long as it is the position of the indicator unit that conveys lock status: A physical component coupled to a guide tab, that indicates by its ~~visible~~ position the locked or unlock position of the guide tab.

5. "Scale"

The dispute is simply the issue of whether the term "scale" requires revealing the "amount" of a setting. The specification provides "amount" as one non-limiting embodiment. LD provides no legal of factual reason why the term should be limited to an embodiment of the specification, rather than its broader disclosure.

D. Count V (6,816,305 to Regan)

1. "nut"

LD asserts - without citation to any evidence - that a nut describes a fastening ring with threading on the inside **or** the outside (LD Opening Brief, page 43). LD builds on this assertion to conclude that under NF's construction, a "nut" having internal threading must therefore exclude an article that also has external threading. Both the assertion and the conclusion are erroneous. NF's proposed construction requires only an internally threaded hole, and does not exclude external threading. This is consistent with fastener 210 of the '305 patent, the only intrinsic evidence for this otherwise undefined term, and with all cited extrinsic evidence. LD's attempt to expand the meaning of "nut" to cover an article with **only** external threading excludes

not only the defining feature of a "nut," but also fastener 210, which is threaded on **both** the inside and the outside.

2. "transversely"

As acknowledged by LD, the term "transversely" is used in every independent claim of the '305 patent. LD asserts that the term means "cross-wise, or in a narrower sense, perpendicular." However, the term is used to describe motion relative to the longitudinal axis of the housing in different ways in the different claims, with claims 1, 8, 16 reciting "**movable transversely *to*** the longitudinal axis," claim 26 reciting "**rotatable transversely *of***," and claim 27 reciting "**pivotable transversely *to*** the longitudinal axis."

LD's proposed construction, "in a direction cross-wise," if substituted into the claim terms above, still leaves the meaning of these terms unclear and inconsistent. Specifically, it cannot be discerned what different direction(s) of movability are being described by the terms "***moveable*** in a direction **cross-wise *to***" "***rotatable*** in a direction **cross-wise *of***" and "***pivotable*** in a direction **cross-wise *to***." LD's propose construction is not able to square these different uses or bring clarity to these different phrases. NF maintains that the term is indefinite.

3. "pre-assembled/pre-assembling"

Stipulated Claim Construction (Doc. No. 45 at 69).

4. "providing"

The dispute is not as to whether "providing" limits the order of performance of the claim steps, as asserted by LD.

With respect to "providing" as requiring manufacture of the provided article, the passages in the specification cited by LD each illustrate "providing" an effect (*i.e.*, *producing* the effect) as a result of manufacturing a sighting device or lens assembly, and are consistent with NF's

proposed construction. Contrary to LD's assertion, "providing" by "sourcing," is not contemplated in the patent.

LD introduces a new dictionary definition of "providing" in its Opening Brief to support its position. This evidence was not cited in the Parties' Joint *Markman* Claim Construction Chart (Doc. N. 45) and therefore is improper and should not be considered.

E. Count VI (7,721,480 to Campean)

1. "spring"

The key difference between NF's and LD's proposed constructions is whether the term is limited to elastic structures that obey the strict mathematics of Hooke's law, or whether it includes elastic structures that may deviate from the mathematics of Hooke's law.[15]

Hooke's law is not mentioned in the '480 patent, nor does the patent limit the disclosed "spring" to an elastic structure having the property defined by the equation F = kX; where F = force, k = spring stiffness constant, and X = displacement/stretch (i.e., Hooke's law, as submitted by LD). As such, LD's construction is unduly narrow and the term should be construed to cover any elastic device that regains its shape after being compressed or extended.

2. "Interfere with . . . and . . . brake"

The dispute is simply the issue of whether the action "to brake" a moving component means "to stop" the motion of that component, or whether it encompasses slowing to less than a full stop. In contending that "brake" is equivalent to "stop," LD points only to two passages in

[15] LD seeks to have it both ways. While LD's proposed construction for "spring" is a "structure behaving according to Hooke's Law," they also argue that "A structure may . . . still be a spring even though it does not follow Hooke's law when deflected beyond its elastic limit." (LD Opening Brief, sentence bridging pp 44-45) LD provides no evidence for their contention that a rubber ball or rubber band does not behave like a spring and/or does not obey Hooke's law.

the '480 patent as evidence,[16] both of which use the term, but neither of which resolves the ambiguity. In view of the above, and for the reasons set for in NF's Opening Brief, NF's proposed construction should be adopted.

F. Count VII (6,351,907 to Otteman)

1. "cam track"

LD is attempting to narrow claims 1 and 10 to exclude the "spiral ridge or rail" embodiment of the cam track, contravening the clear scope of "cam track" as set forth in the specification of the '907 patent. LD argues that formation of a spiral cam track "**in** the drive face" limits claims 1 and 10 to a preferred embodiment, a spiral cam groove. LD admits that the "rail or ridge" embodiment is disclosed in the '907 embodiment, but asserts that it is not claimed in the patent.

LD argues that a spiral cam track "formed **in** the drive face," as recited in claims 1 and 10 is necessarily limited to a groove by the use of the word "in." The phrase "formed in the drive face" was not raised as a term for construction in the Parties' Joint *Markman* Claim Construction Chart, but LD nonetheless attempts to establish a specific construction for this phrase as a basis for construing "cam track," and they do so without reference to either intrinsic or extrinsic evidence.

However, the scope of "cam track" does not rely on construing of "formed in the drive," as reading the term in context as presented in the specification makes clear that the phrase "spiral cam track formed **in** the drive face" does not exclude the spiral "ridge or rail" embodiment:

[16] '480 patent, col 4, lines 4-21 and 22-50.

The focus control knob of the present invention includes a cam hub mounted to the housing for rotation about an axis of rotation. The cam hub includes a drive face positioned facing the interior of the housing and a spiral cam track formed in the drive face around the axis of rotation and spiraling outwardly from the axis of rotation. An actuator slide positioned between the cam hub and the housing of the sight includes a cam follower slidably engaged with the spiral cam track. In one embodiment, the spiral cam track is a spiral groove and the cam follower includes a pin sized to fit within the spiral groove. In an alternative embodiment, the spiral cam track is a spiral ridge or rail and the cam follower is a notch or fork including a slot sized for engaging with the spiral ridge. The actuator slide is slidably mounted

('907, col. 3, lines 28-41). (*emphasis added).* This passage first presents that the cam hub has a spiral "cam track formed in the drive face," then presents the spiral groove *and* the spiral ridge or rail as embodiments of that "spiral cam track formed in the drive face." Thus, it is clear that the inventor did not intend to exclude the raised "ridge or rail" embodiment from the "cam track formed in the drive face."

The proper meaning of spiral "cam track" is also clear from the claims. Independent claims 1 and 10 use the generic term "spiral cam track," and dependent claims 6 and 16 add the "groove" limitation. Had the inventor intended to limit the spiral cam track of claims 1 and 10 to the groove embodiment, as LD argues, they would simply have used the phrase "spiral cam groove" in these independent claims, in exactly the same manner they used this phrase throughout the specification when discussing the groove embodiment.[17] The inventor did not do this, and instead elected to add the narrowing "groove" limitation in dependent claims 6 and 16, making clear that the spiral "cam track" of each the independent claim encompasses the non-groove embodiments.

2. "cam follower"

[17] See, *e.g.*, col. 5. lines 58-59, 63, 63; col. 6, lines 24, 36, 45, 53, and 64-65,

The dispute here is whether the term excludes a cam follower suitable for engaging a cam track comprising a ridge or rail. For the same reasons that "cam track" must be construed as encompassing both the groove and ridge or rail embodiments, the term "cam follower" should be construed so as to encompass both the pin and the notch or fork embodiments, set forth in the specification. LD's argument regarding "engaged **in** a cam track" fails for the same reason that their argument regarding "formed **in** the drive face" fails, as discussed above.

3. "actuator"

The parties agree that the term "actuator" means "a thing that puts something else in motion or action," as stated by LD (LD Opening Brief, page 49). LD asserts that NF's proposed construction improperly limits the scope of the claim to a preferred embodiment. However, it is not NF, but 35 U.S.C. 112(f) (pre-AIA 35 U.S.C. 112, para. 6) that demands this construction.

The term "actuator" does not have any defined structural meaning in the art and is therefore defined by its function, *i.e.*, it is a means for actuating, and *anything* that effects actuation (*e.g.*, a device, an electrical signal, a magnetic field) may be termed an "actuator."

Claims 1, 4, 7, and 8, recite an "actuator," yet provide no hint of what structure provides the "actuator" function.[18] Thus, the term is properly construed as a "means-plus-function" term limited to the corresponding structure(s) (and equivalents) described in the specification, as required by 35 U.S.C. 112(f) and pre-AIA 35 U.S.C. 112, para. 6.[19] "Actuator 122" is the only

[18] Claims 10, 13, and 17-20 of the '907 recite an "actuator slide."

[19] "In making the assessment of whether a limitation in question is a means-plus-function term subject to the strictures of §112, para. 6, the essential inquiry is not merely the presence or absence of the word "means" but whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015). When a claim term lacks the word "means," § 112, para. 6 will apply when the claim term fails to "recite sufficiently definite structure" or else recites "function without reciting sufficient structure for performing that function. *Id, citing Watts v. XL Systems, Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000).

corresponding structure disclosed in the '907 patent and the term "actuator" is thus properly limited to this structure, as provided in NF's proposed construction.

4. "pin"

The dispute here is whether the "pin" of the '907 claims is *any* short rigid protrusion that can act as a cam follower, as provided in LD's proposed construction, or whether a "pin" is a *solid* protrusion. Construction of this term as a "peg or dowel," as presented in NF's Opening Brief, makes clear that the pin is a protrusion composed of a solid material, regardless of whether the pin is an integrally formed part of the actuator or whether it is formed separately and later attached to the actuator. Extrinsic evidence cited by both NF and LD is consistent in construing "pin" as a solid structure. In contrast, the construction proposed by LD is not limited to a *solid* protrusion, but encompasses *any* protruding structure that is short and rigid. NF is willing to accept "a short, rigid protruding structure of solid material" in place of "peg or dowel."

5. "along the longitudinal axis"

The term requires construction because it is disputed whether a movement or direction "along the longitudinal axis" of a housing necessitates any particular proximity to the housing or to its longitudinal axis, or in the alternative, whether the phrase encompasses every movement or direction that is "in the same direction as" or parallel to the longitudinal axis of a tubular housing, regardless of distance from the axis.

LD asserts that the meaning is clear from the claims and specification. However, taking claim 1 as an example, the locus at which the recited actuator is "slidably mounted" is not specified, and the movement "along the longitudinal axis of the housing" could therefore be virtually anywhere in space that is parallel to or in the same direction as the longitudinal axis of the housing. The skilled person cannot determine the metes and bounds of the claim 1, and LD's

proposed construction does not clarify the scope of the claim. As discussed in NF's Opening Brief, the phrase is used in multiple different ways that are not clarified by LD's construction, which is itself open to several different interpretations. The term is therefore indefinite.

LD introduces new dictionary definitions of "longitudinal" and "longitudinal axis" in its Opening Brief to support its position. This evidence was not cited in the Parties' Joint *Markman* Claim Construction Chart (Doc. N. 45) and therefore is improper and should not be considered.

6. <u>"drive face"</u>

The dispute here is whether a "drive face" of a cam hub is a surface that contacts and drives an actuator or cam follower, or whether it applies generically to any designated "face" of a cam hub having a cam track, even if that face is not a working surface, *i.e.*, it does not contact or drive an actuator or cam follower. In its Opening Brief, LD points to the drive face 136 of cam hub 134 as shown in isolation in Fig. 6B. However, as shown in working configuration Fig. 5, drive face 136 is clearly a working surface that contacts the surface of actuator 122 that it drives:

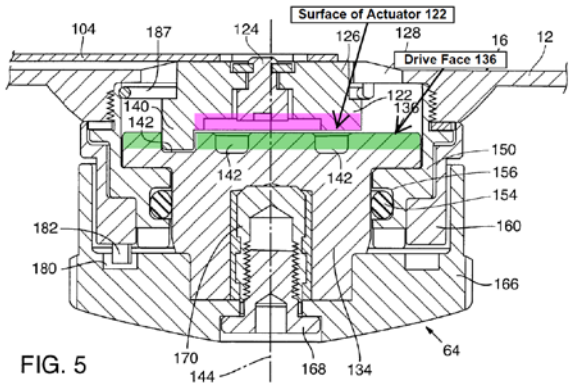

FIG. 5

LD's proposed construction omits any requirement that the "drive face" be a working surface, rendering the word "drive" in "drive face" superfluous. Nonetheless, NF is willing to accept a compromise construction as follows: "the face of a cam hub that contacts and drives an actuator."

December 6, 2017

Respectfully submitted,

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